

Amendment and Response

Applicant: Mark M. Butterworth

Serial No.: 10/092,772

Filed: March 7, 2002

Docket No.: 10011181-1

Title: METHOD AND APPARATUS FOR PERFORMING OPTICAL CHARACTER RECOGNITION (OCR) AND TEXT STITCHING

REMARKS

The following remarks are made in response to the Non-Final Office Action mailed February 16, 2006. In that Office Action, the Examiner rejected claims 1-3, 5-8, 10-14, 16, and 17 under 35 U.S.C. §103(a) as being unpatentable over Nakabayshi, U.S. Patent No. 5,675,672 ("Nakabayshi") in view of Teufel et al., U.S. Patent No. 6,243,503 ("Teufel"). Claims 4, 9, and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakabayshi in view of Teufel, and further in view of Fisher et al., U.S. Publication No. 2001/0030693 ("Fisher").

With this Response, claims 1 and 7 have been amended. Claims 1-17 remain pending in the application and are presented for reconsideration and allowance.

35 U.S.C. §103 Rejections

The Examiner rejected claims 1-3, 5-8, 10-14, 16, and 17 under 35 U.S.C. §103(a) as being unpatentable over Nakabayshi, U.S. Patent No. 5,675,672 ("Nakabayshi") in view of Teufel et al., U.S. Patent No. 6,243,503 ("Teufel"). Amended independent claim 1 recites "receiving direction information indicative of a direction of movement between the image capture device and the document during the capture of the plurality of digital images" and "combining the plurality of electronic text files into a combined text file based on the comparison and the received direction information, wherein the combined text file includes the plurality of characters in the document". With respect to claim 1, the Examiner acknowledged that "Nakabayshi does not explicitly disclose the following claim limitations: receiving direction information indicative of a direction of movement between the image capture device and the document during the capture of the plurality of digital images". (Office Action at para no. 4, page 3). The Examiner argued that Teufel discloses this limitation, citing Teufel at col. 7, lines 40-44. (Office Action at para no. 4, page 3). Teufel at col. 7, lines 40-44 discloses that "[i]n order to be able to detect a larger section of an image plane 20 provided with information, it is necessary that a motion detector 2 detects the movement of reading device 1 along the marked surface and transmits corresponding synchronizing signals to signal processing unit 7."

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Since Nakabayshi does not teach or suggest receiving direction information as recited in claim 1, it logically follows that Nakabayshi also does not teach or suggest “combining the plurality of electronic text files into a combined text file **based on the comparison and the received direction information**”. Teufel also does not teach or suggest combining electronic text files into a combined text file based on received direction information. Rather, as indicated in the above-quoted portion of Teufel, the detected movement is used to generate synchronizing signals in order to be able to detect a larger section of the image plane 20. Thus, Nakabayshi and Teufel, either alone, or in combination, do not teach or suggest combining a plurality of electronic text files into a combined text file based on received direction information, as recited in amended independent claim 1.

In view of the above, independent claim 1 is not taught or suggested by Nakabayshi and Teufel, and is believed to be allowable over the cited references. In addition, dependent claims 2, 3, 5, and 6, which further define patentably distinct claim 1, and are further distinguishable over the cited references, are also believed to be allowable over the cited references. Applicant respectfully requests removal of the rejection of claims 1-3, 5, and 6 under 35 U.S.C. §103(a), and allowance of these claims is respectfully requested.

Amended independent claim 7 recites “a controller coupled to the image sensor and configured to receive direction information indicative of a direction of movement of the digital camera during capture of the plurality of digital images . . . , the controller configured to identify overlapping text between electronic text files and stitch the text in the plurality of text files together based on the identified overlapping text and the received direction information.” With respect to claim 7, the Examiner acknowledged that “Nakabayshi does not explicitly disclose the following claim limitations: a controller coupled to the image sensor and configured to receive direction information indicative of a direction of movement of the digital camera during capture of the plurality of digital images”. (Office Action at para no. 4, page 5). The Examiner argued that Teufel discloses this limitation, citing Teufel at col. 7, lines 40-44. (Office Action at para no. 4, page 5). Teufel at col. 7, lines 40-44 discloses that “[i]n order to be able to detect a larger section of an image plane 20 provided with information, it is necessary that a motion detector 2 detects the movement of reading device 1

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along the marked surface and transmits corresponding synchronizing signals to signal processing unit 7.”

Since Nakabayshi does not teach or suggest receiving direction information as recited in claim 7, it logically follows that Nakabayshi also does not teach or suggest “the controller configured to identify overlapping text between electronic text files and stitch the text in the plurality of text files together **based on** the identified overlapping text and **the received direction information**”. Teufel also does not teach or suggest stitching text in a plurality of text files together based on received direction information. Rather, as indicated in the above-quoted portion of Teufel, the detected movement is used to generate synchronizing signals in order to be able to detect a larger section of the image plane 20. Thus, Nakabayshi and Teufel, either alone, or in combination, do not teach or suggest stitching text in a plurality of text files together based on received direction information, as recited in amended independent claim 7.

In view of the above, independent claim 7 is not taught or suggested by Nakabayshi and Teufel, and is believed to be allowable over the cited references. In addition, dependent claims 8, 10, and 11, which further define patentably distinct claim 7, and are further distinguishable over the cited references, are also believed to be allowable over the cited references. Applicant respectfully requests removal of the rejection of claims 7, 8, 10, and 11 under 35 U.S.C. §103(a), and allowance of these claims is respectfully requested.

Independent claim 12 recites “the processor configured to stitch the text from the electronic text files together based at least in part on direction information indicative of a direction of movement of the digital camera while the digital images are being captured”. With respect to claim 12, the Examiner acknowledged that “Nakabayshi does not explicitly disclose the following claim limitations: based at least in part on direction information indicative of a direction of movement of the digital camera while the digital images are being captured”. (Office Action at para no. 4, page 7). The Examiner argued that Teufel discloses this limitation, citing Teufel at col. 7, lines 40-44. (Office Action at para no. 4, page 7). Teufel at col. 7, lines 40-44 discloses that “[i]n order to be able to detect a larger section of an image plane 20 provided with information, it is necessary that a motion detector 2 detects the

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movement of reading device 1 along the marked surface and transmits corresponding synchronizing signals to signal processing unit 7.”

Since Nakabayshi does not teach or suggest direction information as recited in claim 12, it logically follows that Nakabayshi does not teach or suggest “the processor configured to **stitch the text from the electronic text files together based at least in part on direction information** indicative of a direction of movement of the digital camera while the digital images are being captured”. Teufel also does not teach or suggest stitching text from electronic text files together based at least in part on direction information. Rather, as indicated in the above-quoted portion of Teufel, the detected movement is used to generate synchronizing signals in order to be able to detect a larger section of the image plane 20. Thus, Nakabayshi and Teufel, either alone, or in combination, do not teach or suggest stitching text from electronic text files together based at least in part on direction information, as recited in independent claim 12.

There is a clearly recited relationship between text stitching and direction information in claim 12. Claim 12 recites stitching text “based at least in part on” direction information. The Examiner’s argument ignores this recited relationship and ignores words used in claim 12, which is contrary to established precedent. “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

In view of the above, independent claim 12 is not taught or suggested by Nakabayshi and Teufel, and is believed to be allowable over the cited references. In addition, dependent claims 13, 14, 16, and 17, which further define patentably distinct claim 12, and are further distinguishable over the cited references, are also believed to be allowable over the cited references. Applicant respectfully requests removal of the rejection of claims 12-14, 16, and 17 under 35 U.S.C. §103(a), and allowance of these claims is respectfully requested.

The Examiner rejected claims 4, 9, and 15 under 35 U.S.C. §103(a) as being unpatentable over Nakabayshi in view of Teufel, and further in view of Fisher et al., U.S. Publication No. 2001/0030693 (“Fisher”). Dependent claims 4, 9, and 15 further define patentably distinct claims 1, 7, and 12, respectively, are further distinguishable over the cited references, and are believed to be allowable over the cited references. Applicant respectfully

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requests removal of the rejection of claims 4, 9, and 15 under 35 U.S.C. §103(a), and allowance of these claims is respectfully requested.

CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 1-17 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-17 is respectfully requested.

No fees are required under 37 C.F.R. 1.16(h)(i). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 50-3718.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Any inquiry regarding this Amendment and Response should be directed to either Jeff A. Holmen at Telephone No. (612) 573-0178, Facsimile No. (612) 573-2005 or Guy K. Clinger at Telephone No. (303) 298-9888, Facsimile No. (303) 297-2266. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 6th day of April, 2006.

By: Jeff A. Holmen
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